I CLAIMS

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1. A camera comprising a sensor for receiving radiation representative of a scene, filter means arranged to attenuate the radiation reaching different spatial regions of the sensor to different extents, and decoding means arranged to combine the contributions to the output of the sensor from the different regions, to produce an output of extended dynamic range.

2. A camera as claimed in Claim 1, in which the sensor is arranged to produce an output representative of lines of the image, and the filter means comprises stripes orientated so that the lines of the stripes are inclined to the lines of the image.

3. A camera as claimed in Claim 2, in which the stripes are inclined at an angle within the range ±(45° to 80°) to the lines of the image.

4. A camera as claimed in Claim 3, in which the stripes are at approximately ±45° to the lines of the image.

5. A camera as claimed in any one of Claims 1 to 4, in which the stripes are neutral density stripes.

6. A camera as claimed in any one of Claims 1 to 4, in which the stripes are opaque.

7. A camera as claimed in any one of Claims 1 to 4, in which the stripes are

coloured.

8. A camera as claimed in any one of Claims 1 to 4, in which the stripes are polarising.

9. A camera as claimed in any one of Claims 2 to 8, in which the regions between the stripes are transparent.

10. A camera as claimed in any one of Claims 1 to 9, in which there are two or more sets of stripes, each have different attenuating properties, inclined at different angles to the lines of the sensor.

11. A camera as claimed in any one of Claims 1 to 10, in which the decoding means is arranged to combine successive lines of the image to reinforce the scene and cancel the contribution to the intensity of the stripes.

12. A camera as claimed in any one of Claims 1 to 11, in which the decoding means is arranged to combine successive lines of the image to cancel the contribution to the intensity of the scene and reinforce that of the stripes.

13. A camera as claimed in Claim 11 or Claim 12, in which the decoding means comprises one or more comb filters.

14. A camera as claimed in any one of Claims 1 to 13, in which the sensor is a CCD.

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15. A camera as claimed in any one of Claims 1 to 14, in which the sensor includes an image intensifier.

16. A camera substantially as herein described with reference to and as shown in the accompanying drawings.

17. A camera comprising a sensor for receiving radiation representative of a scene, filter means arranged to attenuate the radiation reaching different spatial regions of the sensor to different extents, and decoding means arranged to combine the contributions to the output of the sensor from the different regions, to produce an output of expanded contrast.

ADD A5